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3. moving cutting means transversely of said material advance;
4. the cutting step is produced while said cylindrical surface continuously rotates about the said axis of rotation;
5. cutting said material while rotating said cylindrical surface in one direction only.

**ELECTION RESTRICTION**

Examiner also stated that newly submitted claims 15-20 were directed to an invention that is independent or distinct from the invention originally claimed for the following reasons, namely, producing a pool liner where as the elected invention used the method of cutting.

Please find enclosed herewith amended claims 8-14 whereby the invention has been changed to:

A Method of Cutting a Vinyl Pool Liner from a Continuous Web of Vinyl to Produce a Pool Liner.

**35 U.S.C. § 102**

Claims 1-7 are rejected as being anticipated by Yanai. In particular Examiner stated that Yanai discloses the invention as claimed, including the steps of, cutting through the material in a selectively manner, while the material is in rolling contact on the cylindrical surface "33" during rotation (see column 5, lines 13-15 and column 1, lines 14-17 and Figure 1).

In this regard Agent for Applicant respectfully states that Yanai teaches:

- a) ... a feed assembly 31 intermittently advances the web 21... (see col. 4, line 12-13)
- b) the intermittent feed assembly 31 sequentially advances the tubular web... (see col. 4, lines 33-33)

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- c) the feed roller 32 is intermittently driven ... (see col. 4, line 41)
- d) ...when the web 21 has been advanced a predetermined length of a bag, as defined by the dimensions setter 38; the sequencer 39 commands interrupt of advancement of the web 21 by the feed 32 and pressure 34 rollers via the first digital pack 37. As shown in Figure 2(B), the upper seal bar 43 then vertically descends toward the web 21...Heat from the upper seal bar 43 melts the web 21, and upon cooling, a weld bead seal is formed (see col. 4, lines 62-67; col. 5, lines-2-4)

In other words the seal bar 43 moves vertically up and down and cuts the bags as the rotation of the roller 32 is intermittently stopped. This can be seen from the following disclosed by Yanai, namely:

the sequencer 39 of the control assembly controls the intermittent rotation of the feed roller 32 via divisional pack 37. The sequencer 39 also controls reciprocation of the steel bar 43 and associated cutting edge (see col. 4, lines 55-60).

In other words the cutting edge of Yanai reciprocates towards the cutting surface while the cutting surface is stationary. This again can be seen from the following disclosed by Yanai, namely:

the seal weld time is set by the timer 49 and controls the amount of time that the upper seal bar 43 remains juxtaposed to a lower seal surface (see col. 6, lines 34-37).

Yanai does not teach:

1. moving cutting means across said cylindrical cutting surface to cut said material;
2. cutting said material by traversing cutting means axially across said surface;
3. moving cutting means transversely of said material advance;

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4. the cutting step is produced while said cylindrical surface continuously rotates about the said axis of rotation;
5. cutting said material while rotating said cylindrical surface in one direction only.

Applicant on the other hand teaches:

- a) ... the drum 20 rotates about its central axis 24 in one direction so as to continually advance the web of material 12 from the roll 14 up over the top of the drum arc...(see page 6, lines 27-29).
- b) Each of the cutting wheels 80 has a sharp cutting edge which can cut the vinyl material 12 as it is rotates about the drum 20 (see page 9, lines 13-14).
- c) In particular the cutting means 70 is movable or displaceable relative the rails 72 as well as the drum 20...the carriage 78 of the cutting means 70 is adapted to slide along the length of the rails 72...(see page 9, lines 16-18).
- d) Accordingly motor 84 can be energized so as to active the pulley wheel 82 thereby causing carriage 78 to move from left to right as shown in Figure 10 and then thereby moving the cutting means 70 and in particular the cutting wheel 80 across the surface of the drum 20 (see page 9, lines 28-30).

In other words Applicant's invention comprises rotating of the drum and continually moving or displacing the cutting means axially along the rails while the drum continuously rotates. The only time that the drum may be momentarily stopped is as follows:

the rotation of the drum may also be momentarily stopped by deactivating the motor 30 and the cutting means 70 activated so as to slide along the rails 72. This would represent a substantially lateral or transverse cut along the length of the web of material 12 as shown in Figure 2 (see page 11, lines 11-14).

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In other words Applicant can produce a lateral cut by moving the cutting means laterally in a direction along the axis of rotation while the drum is momentarily stopped whereas Yanai produces the same type of cut by momentarily stopping the drum and moving the cutting means into the plastic.

On the other hand Applicant produces:

curved cuts such as shown for example in panel B may be made whereby the computerized means energizes the motor 84 in an appropriate manner so as to produce a curved cut B. In other words all of the cutting wheels 80 are activated at the same time but only as desired to make the appropriate cuts (see page 11, lines 15-20).

### DISCUSSION

Applicant's invention relates to a cutting system to cut flexible continuous web materials by advancing the material over a support surface, the cutting means being supported above the support surface on a fixed beam allowing the cutting means to move along the beam transversely to the direction of web advance.

Many web materials have substantial elasticity and/or deformability such that if one were to attempt to lay down and remove the same piece of material unto a flat surface repeatedly, no two layouts would be equivalent for the purpose of cutting pieces accurately and repeatedly.

Accordingly Applicant utilizes a rotating cylinder for the purpose of providing a stable endless moving support surface for cutting pieces from a continuous web.

The cylinder is rotated forward in the advancing direction. Furthermore the web material is wrapped around the cylinders arc in the travel direction to allow at least two displaced cutting means each able to independently and simultaneously travel the full width of the web traverse to the web travel direction.

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Applicant further states that U.S. Patent No. 4, 172,564 does not teach the invention as claimed.  
U.S. Patent No. 4,172,564 teaches:

the cutting means described does not occur on a cylindrical support surface but is disposed upstream from the cylindrical bonding surface (see col. 1, lines 57-59).

Furthermore U.S. Patent No. 4,480,516 and 5,036,359 does not teach the invention disclosed in the amended claims (see col. 5, lines 13-15 and col. 1, lines 14-17 and Figure 1).

### **DEPOSIT ACCOUNT**

Agent for Applicant hereby authorizes the deduction of the following amount from deposit account 11-0687:

one (1) additional independent claim	\$39.00
claims over 20 (3 x \$9) – small entity	\$27.00

### **CONCLUSIONS**

Agent for Applicant respectfully states that the application is now in condition for immediate allowance and respectfully solicits same.

Yours faithfully

Agent for Applicant

  
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